

In the Specification:

Page 1, first paragraph, please change to read as follows:

BACKGROUND OF THE INVENTION

Image segmentation generally concerns selection and/or separation of a selected part of a dataset. Such a dataset notably represents image information of an imaged object and the selected part relates to a specific part of the image. The dataset is in general a multi-dimensional dataset that assigns data values to positions in a multi-dimensional geometrical space. In particular, such datasets can be two-dimensional or three-dimensional images where the data values are pixel values, such as brightness values, grey values or color values, assigned to positions in a two-dimensional plane or a three-dimensional volume.

Page 1, last paragraph, please change to read as follows:

SUMMARY OF THE INVENTION

It is an object of the invention to provide a method of segmenting a selected region from a dataset, which method is computationally fast, more robust and more accurate than the conventional method.

Page 5, second paragraph, please change to read as follows:

BRIEF DESCRIPTION OF THE DRAWING

The sole Figure illustrates the deformation of the adaptive mesh as employed in the method of the invention.

Page 5, third paragraph, please change to read as follows:

DETAILED DESCRIPTION OF THE INVENTION

In a practical implementation of the method of the invention, a triangular adaptive mesh represents the deformable model. The adaptive mesh comprises N vertices with co-ordinates $\hat{x}_1, \dots, \hat{x}_N$. The adaptive mesh is adapted by way of an iterative procedure in which each iteration includes the following two steps:

1. surface detection so as to detect local surface patches of the selected region,
2. reconfiguration of the adaptive mesh so as to update the mesh in that the vertices of the mesh are moved towards the local surface patches.

The reconfiguration of the mesh is done by minimizing the energy:

$$E = E_{ext} + \alpha E_{int}$$